

Pulaski County Health Improvement Plan

2012-2014

County cover by LPHA: Pulaski

Size of Population: 52,270

Priority Health Issues: Chronic Disease Prevention

Supporting Data: Pulaski County vs. Missouri State

Chronic Disease can be defined as diseases that have a prolonged course. They do not resolve on their own and rarely is there a complete cure. Public Health has programs in place that are cost effective and they work.

Nearly 7 out of every 10 Missourians who die each year will die of a chronic disease. Just the prolonged illness and disability arising from these diseases make the quality of life worse for most of the afflicted. Of all health problems, chronic diseases are among the most costly. Yet diseases such as heart disease, stroke, cancer, diabetes, arthritis and asthma are the most controllable, if not preventable!

Cardiovascular disease (CVD) is the leading cause of death in the United States and is responsible for 17% of national health expenditures. As the population ages, these costs are expected to increase substantially. According to the American Heart Association, by 2030, 40.5% of the US population is projected to have some form of CVD. Between 2010 and 2030, real total direct medical costs of CVD are projected to triple, from \$272.5 billion to \$818.1 billion (Circulation, August 9, 2011, <http://circ.ahajournals.org/content/123/8/933>).

Chronic Disease risk factors are a great concern in Pulaski County. For the period ending 2009, the leading causes of death for the county were:

- Heart Disease
- Smoking Attributable Diseases
- Unintentional Injuries
- Diabetes

Table 1.1 shows the Leading Causes of Death rate for Pulaski County and compares them to the state rate for the same cause.

Cause of Death	Pulaski Co. Rate	State Rate
Heart Disease	280.7	245.6
Smoking Attributable		
-Cancer(All types)	212.6	188.4
-Chronic Obstructive Pulmonary Disease	65.2	55.3
-Stroke	83.2	47.8
Unintentional Injuries (All)	49.1	44.97
Diabetes Mellitus	30.8	23.78

Table 1.1-Source: MO DHSS, Death MICA, Chronic Disease MICA

Identified Barriers:

In order to identify evidenced-based strategies to decrease Chronic Diseases the following resources were reviewed:

- MO DHSS MICA's
- MO DHSS County Level Study Profiles
- 2011 County Health Rankings
- Office of the Surgeon General
- CDC

Table 2.1 indicates that Pulaski County has a higher rate of chronic disease risk factors than that of the state.

Risk Factor	Pulaski County	Missouri
Premature Death	8661	8043
Poor or fair health	21%	16%
Poor physical health days	3.9	3.7
Poor mental health days	3.0	3.6
Adult Smoking	28%	24%
Adult Obesity	33%	30%
Motor vehicle crash death rate	21	20
STD infections	680	422
Uninsured adults	22%	17%
Diabetic screening	77%	83%
Mammography screening	35%	62%

Table 2.1-Source: 2011 County Health Rankings

Pulaski County was ranked 52 out of 114 counties in the 2011 County Health Rankings.

County Health Factors are based on weighted scores of four types of factors:

- Health behaviors (Ranked 110 of 114)
- Clinical Care (Ranked 98 of 114)
- Social and Economic (Ranked 16 of 114)
- Physical Environment (Ranked 32 of 114)

Although Pulaski County did poorly in the areas of health behaviors and clinical care, the areas of social and economic and physical environment ranked fairly high. When looking at health risk factors, there are non-modifiable risk factors and modifiable risk factors.

Non-Modifiable risk factors include:

- Male
- Older Age
- Family history of heart disease
- Post-menopausal
- Race (African Americans, American Indians, and Mexican Americans are more likely to heart disease than Caucasians).
- Still, there are many heart disease risk factors that can be controlled. By making changes in your lifestyle, you can actually reduce your risk for heart disease.

Modifiable risk factors include:

- High blood pressure: Over time, high blood pressure promotes plaque buildup in the arteries by making it easier for plaque formation to occur, which can lead to a heart attack.
- High cholesterol levels: High cholesterol is a major contributor to the plaque formation that can lead to a heart attack.
- Diabetes (a chronic condition in its own); having diabetes increases the risk of a heart attack because diabetes can speed up atherosclerosis (blood circulation problems caused by hardening or narrowing of the arteries) and increase blood cholesterol levels.
- Smoking: Smoking plays a role in the buildup of plaque in the arteries, reducing the oxygen in the blood and increasing blood pressure.
- Physical inactivity: low levels of physical activity are associated with obesity and high blood cholesterol. People who participate regularly in aerobic exercise have better cardiovascular fitness, which decreases the overall risk of heart attack and helps lower high blood pressure.
- Being overweight or obese: About 2 out of 3 Americans are overweight or obese. 1 of 8 deaths in the US is caused by an illness directly related to overweight and obesity. Achieving and maintaining a healthy weight can reduce blood cholesterol levels, blood pressure, and the risk for diabetes.
- Stress: Stress can raise blood pressure. The way you manage or respond to stress can increase your risk of a heart attack.
- Alcohol consumption: Excessive alcohol consumption can raise blood pressure and the levels of certain types of fats in your blood, which increases the risk of a heart attack.

Best Practices, evidenced based strategies that are recommended to improve this health issue:

Behavior Change:

- Promote behavioral changes to reduce the risk of Heart Disease and Diabetes or minimize the impact of these chronic diseases.
- Advocate for and/or provide affordable, easily accessible screening opportunities to the general public.
- Advocate for partners to provide easily accessible places for exercise, i.e., trails, PCHD exercise room, churches or schools.

- Provide Chronic Disease Self-Management Program (CDSMP) Classes quarterly.
- Educate the local community during health fairs, public gatherings, clinics, restaurants, etc. on nutrition and the importance of eating healthy to reduce heart disease and diabetes.

Media Campaign:

- Develop and maintain a local and Social Media Campaign.
- Disseminate weekly public health updates as related to heart disease and diabetes and other chronic illnesses.
- Promote behavioral changes to decrease the risk and prevention of heart disease and diabetes.

Form a “Chronic Disease Prevention” Steering Committee.

Design a Coordinated Public Health Action Plan that includes:

- Heart Disease/Diabetes Prevention Strategies
- Resource/Referral List
- Steering Committee
- Mediums to use
- Planning Dates
- List of Contacts

Develop and Implement Education Promotional Events

- Seek and secure additional funding to extend educational opportunities
- Senior Clinic screening will be held monthly at local senior centers.
- Implement an Annual Senior Health Fair
- Advocate for and provide affordable, easily accessible screening opportunities to the general public.
- Promote Wise Woman Program

The following is a list of community support populated based strategies which already exist to support improvement to reduce heart disease risks.

- American Heart Association
- Local schools
- Local Senior Centers
- Local Restaurants
- St. John Hospital Education
- Phelps County Regional Medical Center Education
- Department of Health and Senior Services
- General Leonard Wood Army Community Hospital-Resource Center
- Missouri Foundation of Health
- Missouri Department of Health & Senior Services

Strategies/Interventions

- Discuss goals and objectives with partners- increase awareness of the priority health issue with the Pulaski County Citizens, Local Schools, Local Senior Centers and Local Restaurants. Contact community representative, schedule meetings with the local Senior Centers, local restaurants, PCCN, and the media to reduce the risk of Heart Disease and Diabetes.
- Develop and disseminate a mass media campaign on the negative effects of current lifestyles and risk for heart disease and diabetes by focusing on the positive effects of Modifiable Risk Factors and how to modify them.



PULASKI COUNTY HEALTH DEPARTMENT
HEALTH IMPROVEMENT ACTION PLAN

Public Health
Prevent. Promote. Protect.

County covered by LPHA: Pulaski

Size of Population: 44,208

Priority Health Issue: Intentional and Unintentional Injuries related to MVC

Supporting Data (include period covered and source of data):

- According to the 2003 BRFSS report, Pulaski County has a higher prevalence rate of current smokers than that of the state (30.9% as compared to 26.5%).
- Smoking Attributable Deaths in Pulaski County for 2004 – 2006 was 161.1 per 100,000 as compared to the state rate of 149.2.
- Chronic Disease profile for Pulaski County indicates a significantly high rate (180.2) of disease attributed to tobacco as compared to the state rate (157.6).
- According to the 2007 County level Study on Secondhand Smoke, of the residents surveyed 37.9 % live with someone that smokes; 55.1% thinks smoking should not be allowed in restaurants, and 90.6% think breathing other people's cigarette smoke is harmful to ones' health.

In order to identify evidence-based public policy strategies to improve this priority health issue, the following sources were researched:

- DHSS Intervention MICA
- CDC, MMWR & The Community Guide
- Pulaski County Community Needs Assessment
- Pulaski County Maternal Child Health Coalition
- National Highway Traffic Safety Administration
- MoDOT Highway Safety / Statistical Data

Best Practices, evidence-based strategies that are recommended to improve this health issue:

Injuries Related to Motor Vehicle Crashes – Strategy Strengths....

Behavior Change

- Promotion of smoke-free policies at worksites along with smoking policy presentations, workshops and consultations
- Smoking restrictions can help to increase tobacco use quit rates among moderate to heavy smokers.
- Smoking bans and restrictions to designated smoking areas
- Federal and state increase in sales tax on tobacco products lead to decrease in tobacco product sales and in overall consumption

Media Campaign

- Using youth mass media campaigns shows more promising results than using adults to convey the message

- Adults show improvement in their knowledge of smoking hazards as a result of media campaigns coupled with group education
- Mass media campaigns that utilize local celebrities, sports personalities, etc. are more effective than using less well-known people.
- Policy is more likely to be passed by the public (increase sales taxes, smoking bans) when a mass media campaign is also conducted in the community.

Resources Required

Add here

Following is an inventory of public policy, population based strategies, and community physical environment that already exists to support improvement in the priority issue:

- Missouri Seat Belt, Car Seat, and Booster Seat Laws
- MoDOT Transportation and Safety Campaigns
- Partnerships within the community – local school districts, day care facilities, and local law and safety officers.

Interventions that are planned for implementation

Preparation

- Develop program goals and objectives
- Create community awareness campaign
- Choose meaningful partners to engage in campaign
- Determine needed resources
- Create a timeline – consider evaluation strategy

Strategies / Interventions

- Discuss goals and objectives with partners – Increase awareness of the priority health issue with the Pulaski County Community Network (PCCN), local school administration and the Maternal Child Health Coalition (MCHC).
- Contact political and community representatives – Schedule meeting with city and county municipalities to discuss the need for a smoke free environment and the need for smoking bans
- Develop and disseminate a mass media campaign on the negative effects of smoking and health implications for chronic diseases
- Disseminate and compile data results of a “community readiness assessment”; if the community is ready proceed with local grassroots ordinance campaign

Targeted Group/Geographic Area:

- Size of Population: Board of Trustees (5), County Commissioners (3); City Officials (5), School Administration (6) and Maternal Child Care Coalition (18).
- Entire county population (~ 44,208) for media campaign, education and public awareness.
- School-Age children grades 1 – 3 in each local school district.

Outcomes that the plan is intended to achieve:

- Increase public awareness / knowledge of car seat and booster seat safety
- Educate and mobilize local advocates, empower concerned citizens, and help change community attitudes regarding car seat and booster seat safety.

Long-term Outcome

Develop, enact, and implement effective smoke free air laws that protect people from the disease and death caused by second hand smoke.

Identified Barriers:

- Social Norms – there is a higher degree of social acceptance of cigarettes and smoking and less negativity associated with secondhand smoke exposure in rural communities
- Lack of Knowledge – in general, people living in rural areas have less knowledge about the harmful effects of tobacco use
- Tobacco Industry – the impact on advertisement and their degree of lobbying efforts
- Rate of smoking in the adult population in the county
- Precedence – No current city or county ordinances barring smoking in eating establishments; No current enforcement of Missouri’s Clean In-Door Air Act.

Evaluation Plan (describe how success will be measured):

Media Campaign

- Assessment of how frequently the messages were run, when they were run, and if the actual message fit with what was intended
- Surveys to determine the extent to which messages were seen, whether the intended audience has heard of the campaign and how much or how many of the messages were remembered
- Community wide surveys to assess changes in knowledge, attitudes or tobacco use

Environment & Policy Initiatives

- Assessment of current policies on tobacco and previous efforts that have been conducted to address policy change
- Assessment of political entities’ and community partners’ attitudes toward policy development and/or change prior to and preceding awareness campaign
- Assessment of the number of local restaurants and workplaces that follow the Missouri Clean In-Door Air Act prior to and preceding the awareness campaign
- Assessment of the number of smoking bans prior to and preceding the environment initiative

Baseline Data / Benchmark(s) (what data will be collected, who and how it will be collected?):

- Number of restaurants and workplaces that enforce the Missouri Clean In-Door Air Act
- Number of restaurants and workplaces that have a smoke-free policy
- Number of county and city officials willing to participate in the environment initiative
- Becky McClain, RN, Health Educator and Marty Gann, Office Manager will collect data by face-to-face interviews and open meetings.

Summary Report of Community Collaborative

The Pulaski County Health Department (PCHD) Office Manager, EPHS, and Health Educator will inventory the number of restaurants with smoking-free policies, the number of establishments that have limited space for designated smoking areas, and the number of facilities that have open smoking and the number of public facilities that comply with Missouri Clean-In Door Act. This information, along with the readiness and/or willingness of the restaurants to change policy will be presented to the PCHD Board of Trustees, the Pulaski County Commissioners, the Pulaski County Community Network (PCCN), and the Pulaski County Maternal Child Health Coalition.

The Administrator and the Public Information Officer for the public health department will use information concerning best practices, evidence-based strategies, and Environment and Policy Initiatives from MICA, Intervention web-site to address issues and practices that will increase awareness and knowledge of smoking hazards. This information will also be used to develop a media campaign that will be disseminated to the community via news releases, public health updates, radio broadcast and health fairs. A brochure will be developed and members of the South Central Cancer Coalition, the PCCN and the MCH Coalition will assist with the dissemination of the brochure. The health department will also partner with a local pharmacy to sponsor daily public health updates that will run Monday – Friday.

The Pulaski County Health Department will educate and mobilize community leaders to discuss the effects of second hand smoke and the need for smoking bans. The lead health educator for the health department, members of the PCCN, and the MCHC will work together to develop a grassroots campaign to determine the need for, the readiness for, and the development of a county wide smoke free ordinance.

Action Steps:

- See attached Logic Model



PULASKI COUNTY HEALTH DEPARTMENT
HEALTH IMPROVEMENT ACTION PLAN

Public Health
Prevent. Promote. Protect.

County covered by LPHA: Pulaski

Size of Population: 52,274

Priority Health Issue: Smoking Attributable Diseases

Supporting Data (include period covered and source of data):

- According to the 2007 BRFSS report, Pulaski County has a higher prevalence rate of current smokers than that of the state (30.9% as compared to 25.0%).
- Smoking Attributable Deaths in Pulaski County for 2004 – 2006 was 161.1 per 100,000 as compared to the state rate of 149.2.
- Chronic Disease profile for Pulaski County indicates a significantly high rate (180.2) of disease attributed to tobacco as compared to the state rate (157.6).
- According to the 2007 County level Study on Secondhand Smoke, of the residents surveyed 37.9 % live with someone that smokes; 55.1% thinks smoking should not be allowed in restaurants, and 90.6% think breathing other people's cigarette smoke is harmful to ones' health.

In order to identify evidence-based public policy strategies to improve this priority health issue, the following sources were researched:

- DHSS Intervention MICA
- CDC, MMWR & The Community Guide
- The American Lung Association
- South Central Cancer Coalition
- MFH Tobacco Prevention and Cessation Initiative
- Science Daily

Best Practices, evidence-based strategies that are recommended to improve this health issue:

Tobacco – Evidence-based Environment & Policy Initiatives

Behavior Change

- Promotion of smoke-free policies at worksites along with smoking policy presentations, workshops and consultations
- Smoking restrictions can help to increase tobacco use quit rates among moderate to heavy smokers.
- Smoking bans and restrictions to designated smoking areas
- Federal and state increase in sales tax on tobacco products lead to decrease in tobacco product sales and in overall consumption

Media Campaign

- Using youth mass media campaigns shows more promising results than using adults to convey the message

- Adults show improvement in their knowledge of smoking hazards as a result of media campaigns coupled with group education
- Mass media campaigns that utilize local celebrities, sports personalities, etc. are more effective than using less well-known people.
- Policy is more likely to be passed by the public (increase sales taxes, smoking bans) when a mass media campaign is also conducted in the community

Following is an inventory of public policy, population based strategies, and community physical environment that already exists to support improvement in the priority issue:

- 5 A’s Smoking Cessation Techniques – Health Department Staff
- American Lung Association, Freedom From Smoking – Cessation Classes
- Teens Against Tobacco Use (TATU) in local school districts

Interventions that are planned for implementation

Preparation

- Develop program goals and objectives
- Create community awareness campaign
- Choose meaningful partners to engage in campaign
- Determine needed resources
- Create a timeline – consider evaluation strategy

Strategies / Interventions

- Discuss goals and objectives with partners – Increase awareness of the priority health issue with the Pulaski County Community Network (PCCN), local school administration and the Maternal Child Health Coalition (MCHC).
- Contact political and community representatives – Schedule meeting with city and county municipalities to discuss the need for a smoke free environment and the need for smoking bans
- Develop and disseminate a mass media campaign on the negative effects of smoking and health implications for chronic diseases
- Disseminate and compile data results of a “community readiness assessment”; if the community is ready proceed with local grassroots ordinance campaign

Targeted Group/Geographic Area:

- Size of Population: Board of Trustees (5), County Commissioners (3); City Officials (5), School Administration (6) and Local Restaurants (116)
- Entire county population (~ 52,274) for media campaign, education and public awareness

Outcomes that the plan is intended to achieve:

- Increase public awareness / knowledge of smoking hazards
- Educate and mobilize local advocates, empower concerned citizens, and help change community attitudes regarding smoking in enclosed workplaces and public places

Long-term Outcome

Develop, enact, and implement effective smoke free air laws that protect people from the disease and death caused by second hand smoke.

Identified Barriers:

- Social Norms – there is a higher degree of social acceptance of cigarettes and smoking and less negativity associated with secondhand smoke exposure in rural communities
- Lack of Knowledge – in general, people living in rural areas have less knowledge about the harmful effects of tobacco use
- Tobacco Industry – the impact on advertisement and their degree of lobbying efforts
- Rate of smoking in the adult population in the county
- Precedence – No current city or county ordinances barring smoking in eating establishments; No current enforcement of Missouri’s Clean In-Door Air Act.

Evaluation Plan (describe how success will be measured):

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Environment & Policy Initiatives

- Assessment of current policies on tobacco and previous efforts that have been conducted to address policy change
- Assessment of political entities’ and community partners’ attitudes toward policy development and/or change prior to and preceding awareness campaign
- Assessment of the number of local restaurants and workplaces that follow the Missouri Clean In-Door Air Act prior to and preceding the awareness campaign
- Assessment of the number of smoking bans prior to and preceding the environment initiative

Baseline Data / Benchmark(s) (what data will be collected, who and how it will be collected?):

- Number of restaurants and workplaces that enforce the Missouri Clean In-Door Air Act
- Number of restaurants and workplaces that have a smoke-free policy
- Number of county and city officials willing to participate in the environment initiative
- Connie Miles, LPN, Health Educator and Deborah Baker, Health Education Assistant, will collect data by face-to-face interviews and open meetings.

Summary Report of Community Collaborative

The Pulaski County Health Department (PCHD) Nursing Department, EPHS, and Health Educator will inventory the number of restaurants with smoking-free policies, the number of

establishments that have limited space for designated smoking areas, and the number of facilities that have open smoking and the number of public facilities that comply with Missouri Clean-In Door Act. This information, along with the readiness and/or willingness of the restaurants to change policy will be presented to the PCHD Board of Trustees, the Pulaski County Commissioners, the Pulaski County Community Network (PCCN), and the Pulaski County Maternal Child Health Coalition.

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Action Steps:

- See attached Logic Model